Examining the Relationship Between Prospective Turkish Teachers’ Public Speaking Anxiety and Digital Speech Tendencies

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Abstract

This research aims to determine the relationship between prospective Turkish teachers’ public speaking anxiety and digital speaking tendencies. In this context, 181 prospective teachers from different grades studying in the Turkish language teaching program of a state university in the west of Turkey were examined. The relational surveying method, which is one of the quantitative research methods, was used. "Public Speaking Anxiety Scale" and "Digital Speaking Tendency Scale" were used as data collection tools in the research. As a result of the analysis, it was determined that the data showed normal distribution, so independent sample t-test and one-way ANOVA analyzes were used in the study. In addition to them, arithmetic mean and standard deviation values were used. According to the results, it is seen that prospective Turkish teachers’ public speaking anxiety levels and digital speaking tendencies are at the moderate level. Furthermore, it was concluded that public speaking anxiety levels and digital speaking tendencies did not show a significant difference according to gender, grade level, the average number of books read in a year and time spent on the internet in an average day. Turkish teachers should be given training and courses in order to reduce the anxiety of speaking in public and to raise awareness. Speech anxiety can also be prevented by adding the cause or causes of speech disorders and solving errors in the curriculum at all education levels. Therefore, it has been concluded that there is a positive and low-level significant relationship between prospective Turkish teachers' public speaking anxiety and digital speaking tendency.

Keywords: Digital Speech, Speaking Anxiety, Turkish Education.

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Introduction

Language is the most basic communication tool used by people to convey their feelings, thoughts and wishes. Scientists make different language definitions. According to Özbay (2003), a language is a communication tool that has essential functions in every field, from developing culture and civilization to people's problems in their daily lives. The most accepted definitions for language set some limitations, Saussure's (1985) definition limited to a system, Chomsky's (1957) definition set of sentences and Sapir's (1921) definition limited it to humans, is Ergin's (1972) definition is language is a natural means of communicating between people. It is a living being that has its laws and develops only within the framework of these laws, a system of collusion whose foundation was laid at unknown times, a social institution woven from voices." In language education and training, listening, speaking, reading and writing skills are handled separately and developed in the process (Eryaman, 2008). In teaching Turkish as a mother tongue and a foreign language, each of these four language skills is treated as a different field and developed using different methods and techniques for each skill.

Speaking has been defined as verbally expressing thoughts with the words of a language (T.D.K., 2005). Speaking skill is an important skill used in every moment and area of life for the individual to communicate with his environment and continue his life. In order to exist and be accepted in society, a person must be able to express himself correctly and effectively. For the language to be used correctly, beautifully and effectively, speaking skills should be supported by reading, writing and listening skills (Gün and Akkaya, 2016; Güzel and Barın, 2013; Temizyürek, Erdem, and Temizkan, 2011). The most suitable environment in which language performance can be exhibited is speaking. There can be no listening without speaking. With the existence of speech, it is possible to develop listening skills (Kurudayoğlu, 2003). It can be mentioned that the effectiveness of the comprehension skill can be mentioned based on the narration skill. Speaking skill is both a complex and multidimensional skill. Speaking is a skill that can be acquired and developed. The speech takes place by the sequential and simultaneous operation of many organs, both physically and mentally. As in mother tongue teaching or language learning, speaking skill plays a decisive role at every stage and level of education. In order to understand and learn a lesson or subject, teachers' comprehension and expression skills must be highly developed.

Speech anxiety is a phobia. Social phobia is the state of being anxious and afraid of being funny for more than one situation in which the person will be evaluated by others (Marks and Gelder, 1966). This situation consists of the feeling of being in the eyes of others for socializing environments. In addition, there may be anxiety not to look ridiculous (Liebowitz, 1987). In general, social phobia is considered the fear of situations in which the person will not feel well. According to Burger (2006), anxiety is an emotional experience that feels bad; it can lead to panic, sadness, anxiety,
and uneasiness. Some individuals experience this anxiety while eating, walking, walking or speaking in general, while others experience this anxiety only when speaking in public. Speaking anxiety can be explained as uneasiness and failure felt by the person who will speak in front of a group of people (Bodie, 2010). Speaking anxiety is the fear of appearing ridiculous to others after speaking.

If we interpret speech anxiety as communication anxiety from a broad perspective, it can be said that it is divided into two basic situations. First, speaking anxiety in general communication moments in social environments is not the same as speaking anxiety in public for any moment of the day. Second, in the field of Turkish education, studies are using different measurement tools related to speaking anxiety (Gündüz and Demir, 2021; Ünal and Özer, 2017; Sevim, 2012; Sofu, 2012; Yaman and Sofu, 2013). However, no research was found using a measurement tool for public speaking anxiety.

The world population is approximately 7.8 billion. This is reflected in the statistics that at least 4.9 billion of the population actively use the internet (Worldometers, 2021). Many life activities such as shopping, education, museum and exhibition trips have overflowed to digital environments in today's world. In short, there are shops, schools, libraries and museums in a digital virtual world. States have started to use the digital world to provide faster service to their citizens. People socialize heavily in these environments and websites. Thus, the possibilities of self-expression of people, who are the building blocks of society, have been transferred to digital environments. The digital world, which has developed in the last twenty years and has become indispensable day by day, has brought new skills and experiences (Ustubulut, 2021). Lectures, meetings and studies in front of the camera became common. In order to keep up with age, it is necessary to develop language skills and determine their needs by questioning, depending on their socialization status in the digital world (Kana, Yağmur and Elkıran, 2017).

This study reveals the relationship between prospective Turkish teachers’ public speaking anxieties and their digital speaking tendencies in line with the explanations. Thus, it is thought to understand prospective teachers’ perceptions in the digital environment and public speaking. The research problems determined by the purpose of the research are presented below:

1. What is the level of public speaking anxiety of prospective Turkish teachers?
2. What is the digital speaking disposition of prospective Turkish teachers?
3. Do prospective Turkish teachers’ public speaking anxieties differ significantly according to gender, grade level, the average number of books read in a year, and time spent on the internet in an average day?
4. Do the digital speaking tendencies of prospective Turkish teachers differ significantly according to gender, grade level, the average number of books read in a year and time spent on the internet in an average day?

5. Is there a relationship between prospective Turkish teachers’ public speaking anxiety and their digital speaking tendencies?

Method

Research Model

In this study, the correlational survey model, which is one of the quantitative research methods, was used to examine the correlation between the digital writing attitudes of prospective Turkish teachers and their digital reading tendencies. The relational surveying model, which is one of the main methods of correlational and causal comparison methods, and research that examines relationships and connections are often called associational research (Büyüköztürk, Kılıç Çakmak, Akgün, Karadeniz, and Demirel, 2018). In this study, the relationships between the digital writing attitudes of prospective Turkish teachers and their digital reading tendencies and the variables collected with data collection tools were examined.

Data Collection Tools

The "Public Speaking Anxiety Scale" developed by Bartholomay and Houlihan (2016) was adapted into Turkish by Çabuker, Çelik and Aldemir (2020). The scale requires a Likert-type scoring between 1 and 5. The scale consists of 16 items in total. The sub-dimensions of the scale are named "cognitive", "behavioural", and "psychological". The cognitive sub-dimension consists of seven items; the behaviourist sub-dimension consists of four items, and the psychological sub-dimension consists of five items. (Çabuker, Çelik, and Aldemir, 2020).

The "Digital Speech Tendency Scale" was developed by Yurdakal and Kırmızı (2019) as a 5-point Likert type scale. The scale consists of 16 items in total. The sub-dimensions of the scale are "negative point of view towards digital speech", "positive point of view towards digital speech", "characteristics of digital speech". The sub-dimension of negative perspective towards digital speech consists of seven items, the positive perspective towards digital speaking sub-dimension consists of five items. Finally, the characteristics of the digital speech sub-dimension consist of four items (Yurdakal and Kırmızı, 2019).

A reliability study was conducted within the scope of the research. The Cronbach-Alpha internal consistency coefficient calculated for the "Public Speaking Anxiety Scale" was .915, and the Cronbach-Alpha internal consistency coefficient for the whole "Digital Speech Tendency Scale" was calculated as .752. The Cronbach-Alpha, internal consistency coefficient for the "Public Speaking
Anxiety Scale" sub-dimensions was calculated as .860 for the cognitive sub-dimension, .736 for the behavioural sub-dimension, and .714 for the psychological sub-dimension. The Cronbach-Alfa internal consistency coefficient for the "Digital Speech Tendency Scale" sub-dimensions was calculated as .835 in the Negative Perspective on Digital Speech sub-dimension, .815 in the Positive Perspective on Digital Speech sub-dimension, and .794 in the Features of Digital Speech sub-dimension. Accordingly, it can be concluded that the scales are reliable.

Data Analysis

SPSS package program, one of the quantitative data analysis software, was used in the research. Standard deviation (Sd) and arithmetic mean (x̄) values were used in the study. According to George and Mallery (2010), the value ranges providing normality are between (+2.0) – (-2.0). Therefore, the skewness and kurtosis values obtained from this study ranged from -2 to +2. Since the skewness and kurtosis values showed normal distribution, t-test, one-way ANOVA and Pearson correlation analyzes were used for the analysis.

Participants

The research sample group consists of 181 prospective Turkish teachers studying at Çanakkale Onsekiz Mart University Turkish Education Department. Descriptive statistical analyzes of the sample group of the study are given in the following part. In addition, the participants' gender distribution is given in table 1.

Table 1. Gender Distribution of the Participants

<table>
<thead>
<tr>
<th>Gender</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>127</td>
<td>70.2</td>
</tr>
<tr>
<td>Male</td>
<td>54</td>
<td>29.8</td>
</tr>
</tbody>
</table>

When Table 1 is examined, it is seen that 70.2% of the study participants are female, and 29.8% are male. The distribution of the participants' grade level is given in table 2.

Table 2. Grade Levels of the Participants

<table>
<thead>
<tr>
<th>Grades</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Grade</td>
<td>32</td>
<td>17.7</td>
</tr>
<tr>
<td>Second Grade</td>
<td>37</td>
<td>20.4</td>
</tr>
<tr>
<td>Third Grade</td>
<td>51</td>
<td>28.2</td>
</tr>
<tr>
<td>Fourth Grade</td>
<td>61</td>
<td>33.7</td>
</tr>
</tbody>
</table>

When Table 2 is examined, it is seen that 17.7% of the participants are first grade, 20.4% are second grade, 28.2% are third grade, and 33.7% are fourth grade. The average number of books read by the participants is given in table 3.
When Table 3 is examined, it is seen that 25.4% of the respondents read 0-5 books, 24.3% read 6-10 books, 22.7% read 11-15 books, 27.6% read 16 or more books in a year. The average time spent on the internet by the participants is given in table 4.

When Table 4 is examined, it is seen that 10.5% of the respondents spend 0-1 hour, 21.5% 2-3 hours, 35.9% 4-6 hours, 32% spend 7 hours or more on the internet in a day.

**Results**

Analysis results of prospective Turkish teachers' public speaking concerns are given in table 5.

When Table 5 is examined, when the total scale score is taken into account, it is revealed that prospective Turkish teachers stated their public speaking anxiety levels as "I partially agree". This statement corresponds to the moderate degree according to the evaluation of Likert-type scale statements. In addition to this, it is revealed that they stated "I partially agree" in cognitive, behavioural and psychological sub-dimensions. Finally, the analysis results of prospective Turkish teachers' digital conversation tendencies are given in table 6.

When Table 6 is examined, when the total scale score is taken into account, it is revealed that prospective Turkish teachers stated their digital conversation tendencies as "I agree". This statement corresponds to the moderate degree according to the evaluation of Likert-type scale statements in cognitive, behavioural and psychological sub-dimensions. Finally, the analysis results of prospective Turkish teachers' digital conversation tendencies are given in table 6.

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>N</th>
<th>x</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive</td>
<td>181</td>
<td>2.92</td>
<td>.78</td>
</tr>
<tr>
<td>Behavioral</td>
<td>181</td>
<td>2.86</td>
<td>.78</td>
</tr>
<tr>
<td>Psychological</td>
<td>181</td>
<td>3.03</td>
<td>.70</td>
</tr>
<tr>
<td>Total</td>
<td>181</td>
<td>2.96</td>
<td>.70</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>N</th>
<th>x</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative Perspective</td>
<td>181</td>
<td>2.74</td>
<td>.81</td>
</tr>
<tr>
<td>Positive Perspective</td>
<td>181</td>
<td>2.85</td>
<td>.82</td>
</tr>
<tr>
<td>Features of Digital Speech</td>
<td>181</td>
<td>3.48</td>
<td>.85</td>
</tr>
<tr>
<td>Total</td>
<td>181</td>
<td>2.96</td>
<td>.47</td>
</tr>
</tbody>
</table>
According to Table 6, when the total scale score is taken into account, it can be seen that prospective Turkish teachers state their digital speaking disposition levels as "I partially agree". In addition, it is revealed that prospective Turkish teachers stated their tendency levels as "I partially agree" in the sub-dimensions of negative perspective towards digital speech and positive perspective towards digital speech. However, in the sub-dimension of the characteristics of digital speech, it is revealed that the tendency level is "agree". Kurtosis and skewness values of the scales are given in table 7.

**Table 7. Kurtosis and Skewness Values of The Scales**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive</td>
<td>-.109</td>
<td>-.318</td>
</tr>
<tr>
<td>Behavioral</td>
<td>-.056</td>
<td>-.277</td>
</tr>
<tr>
<td>Psychological</td>
<td>-.229</td>
<td>.064</td>
</tr>
<tr>
<td>Public Speaking Anxiety (Total)</td>
<td>-.194</td>
<td>-.174</td>
</tr>
<tr>
<td>Negative Perspective on Digital Conversation</td>
<td>.199</td>
<td>.403</td>
</tr>
<tr>
<td>Positive Perspective on Digital Conversation</td>
<td>.184</td>
<td>.306</td>
</tr>
<tr>
<td>Features of Digital Speech</td>
<td>-.271</td>
<td>.224</td>
</tr>
<tr>
<td>Digital Conversation Trend (Total)</td>
<td>-.026</td>
<td>.429</td>
</tr>
</tbody>
</table>

When Table 7 is examined, it can be seen that the public speaking anxiety scale skewness and kurtosis values for the total scale score (Skewness -.194, Kurtosis: -.174). In addition to that, skewness and kurtosis values of the sub-dimensions of the scale are respectively, cognitive sub-dimension (Skewness: -.109, Kurtosis: -.318), behavioural sub-dimension (Skewness: -.174) .056, Kurtosis: -.277), psychological sub-dimension (Skewness: -.229, Kurtosis: .064). Besides that, the digital speech disposition scale skewness and kurtosis values for the total scale score (Skewness: -.026, Kurtosis: .429) negatively affected digital speech. The sub-dimension of the perspective sub-dimension (Skewness: -.199, Kurtosis: .403), the positive point of view towards digital speech (Skewness: .184, Kurtosis: .306), the characteristics of digital speech sub-dimension (Skewness: -.271, Kurtosis: .359) It turns out that it takes a value between -2 and +2. According to George and Mallory (2010), the value ranges providing normality are between (+2.0) – (-2.0). In this context, considering that the data obtained from the scales and sub-dimensions take values between -2 and +2, parametric (normally distributed) tests will be applied for the analyzes in this study.

In order to determine whether the dimensions of prospective Turkish teachers' perceptions of public speaking anxiety and the scale differ according to the gender variable, independent groups t-test was applied, and the results are shown in table 8.
Table 8. Analysis Results of Prospective Turkish Teachers' Public Speaking Anxiety Levels by Gender

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Gender</th>
<th>N</th>
<th>x</th>
<th>Sd</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive</td>
<td>Female</td>
<td>127</td>
<td>2.93</td>
<td>.79</td>
<td>.33</td>
<td>.73</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>54</td>
<td>2.89</td>
<td>.76</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioral</td>
<td>Female</td>
<td>127</td>
<td>2.91</td>
<td>.79</td>
<td>1.32</td>
<td>.18</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>54</td>
<td>2.75</td>
<td>.73</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychological</td>
<td>Female</td>
<td>127</td>
<td>3.05</td>
<td>.72</td>
<td>.69</td>
<td>.48</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>54</td>
<td>2.97</td>
<td>.66</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Female</td>
<td>127</td>
<td>2.99</td>
<td>.72</td>
<td>.89</td>
<td>.37</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>54</td>
<td>2.89</td>
<td>.66</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As it can be seen in Table 8, when the whole of the prospective Turkish teachers' public speaking anxiety scale is taken into account, there is no significant difference in terms of gender (t(179) = .89, p > .05). However, when the sub-dimensions of the scale were examined, cognitive (t(179)= .33, p > .05), behavioral (t(179)= 1.32, p > .05), psychological (t(179)= .69, p > .05) dimensions do not show a significant difference in terms of gender.

In addition, the independent groups' t-test was applied to determine whether the perceptions of the sub-dimensions and the scale constituting the digital speaking tendencies of the prospective Turkish teachers differ according to the gender variable, and the results are shown in table 9.

Table 9. Analysis Results of Prospective Turkish Teachers' Digital Speaking Tendency Levels by Gender Variable

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Gender</th>
<th>N</th>
<th>x</th>
<th>Sd</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative Perspective on Digital Conversation</td>
<td>Female</td>
<td>127</td>
<td>2.80</td>
<td>.819</td>
<td>1.6</td>
<td>.11</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>54</td>
<td>2.59</td>
<td>.803</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Perspective on Digital Conversation</td>
<td>Female</td>
<td>127</td>
<td>2.76</td>
<td>.77</td>
<td>-2.4</td>
<td>.01*</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>54</td>
<td>3.08</td>
<td>.89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Features of Digital Speech</td>
<td>Female</td>
<td>127</td>
<td>3.47</td>
<td>.79</td>
<td>.30</td>
<td>.76</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>54</td>
<td>3.51</td>
<td>.98</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Female</td>
<td>127</td>
<td>2.96</td>
<td>.44</td>
<td>-2.23</td>
<td>.81</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>54</td>
<td>2.97</td>
<td>.52</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As can be seen in Table 9, when the total scale score of digital speaking tendencies of prospective Turkish teachers is taken into account, it does not show a significant difference in terms of gender (t(179) = -.23, p > .05). On the other hand, when the sub-dimensions of the scale are examined, there is no significant difference found between the negative perspective towards digital speech (t(179) = 1.6, p > .05) and the characteristics of digital speech (t(179) = .30, p > .05) in terms of gender variable. In addition, there is a significant difference found in favour of prospective male teachers in terms of gender variable (t(179) = -2.4, p < .05) in the sub-dimension of positive perspective towards digital speaking. In other words, male prospective Turkish teachers' perceptions of positive perspective towards digital speaking (x = 3.08) are higher than female prospective Turkish teachers (x= 2.76).
According to the total scale score and sub-dimensions scores of the public speaking anxiety scale in terms of grade level, a one-way ANOVA test was applied to determine whether the perception levels of prospective Turkish teachers regarding public speaking anxiety differ. The results obtained as a result of the tests applied are shown in Table 10.

**Table 10. One-Way ANOVA Analysis Results of Prospective Turkish Teachers' Public Speaking Anxiety According to Grade Level Variable**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>sd</th>
<th>Mean Squares</th>
<th>F</th>
<th>p</th>
<th>Significant Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive</td>
<td>Between Groups</td>
<td>1.437</td>
<td>3</td>
<td>1.005</td>
<td>1.655</td>
<td>.178</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>88.177</td>
<td>177</td>
<td>.607</td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>89.614</td>
<td>180</td>
<td></td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Behavioral</td>
<td>Between Groups</td>
<td>3.016</td>
<td>3</td>
<td>.066</td>
<td>.107</td>
<td>.956</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>107.496</td>
<td>177</td>
<td>.618</td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>110.512</td>
<td>180</td>
<td></td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Psychological</td>
<td>Between Groups</td>
<td>.198</td>
<td>3</td>
<td>.479</td>
<td>.961</td>
<td>.412</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>109.373</td>
<td>177</td>
<td>.498</td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>109.571</td>
<td>180</td>
<td></td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>Between Groups</td>
<td>.095</td>
<td>3</td>
<td>.032</td>
<td>.063</td>
<td>.979</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>89.005</td>
<td>177</td>
<td>.503</td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>89.101</td>
<td>180</td>
<td></td>
<td></td>
<td></td>
<td>-</td>
</tr>
</tbody>
</table>

According to Table 10, the perception levels of prospective Turkish teachers towards public speaking anxiety do not show a significant difference according to the grade level variable \[F(3,177) = .063, p>.05\]. On the other hand, perception levels of public speaking anxieties were correlated with cognitive \[F(3,177) = 1.655, p>.05\], behavioral \[F(3,177) = .107, p>.05\] and psychological \[F(3,177) = .961, p>.05\] does not show a significant difference in sub-dimensions according to the grade level variable.

According to the total scale score and sub-dimension scores of the digital speaking disposition scale in terms of grade level, a one-way ANOVA test was applied to determine whether the perception levels of prospective Turkish teachers towards digital speaking dispositions differ. The results obtained as a result of the tests applied are shown in Table 11.

**Table 11. One-Way ANOVA Analysis Results of Prospective Turkish Teachers' Digital Speech Tendency by Grade Level Variable**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>sd</th>
<th>Mean Squares</th>
<th>F</th>
<th>p</th>
<th>Significant Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative Perspective on Digital</td>
<td>Between Groups</td>
<td>1.187</td>
<td>3</td>
<td>.396</td>
<td>.587</td>
<td>.624</td>
<td>-</td>
</tr>
<tr>
<td>Conversation</td>
<td>Within Groups</td>
<td>119.303</td>
<td>177</td>
<td>.674</td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>120.489</td>
<td>180</td>
<td></td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Positive Perspective on Digital</td>
<td>Between Groups</td>
<td>3.894</td>
<td>3</td>
<td>1.298</td>
<td>1.948</td>
<td>.124</td>
<td>-</td>
</tr>
<tr>
<td>Conversation</td>
<td>Within Groups</td>
<td>117.925</td>
<td>177</td>
<td>.666</td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>121.819</td>
<td>180</td>
<td></td>
<td></td>
<td></td>
<td>-</td>
</tr>
</tbody>
</table>
According to Table 11, digital speaking tendencies of prospective Turkish teachers show a significant difference according to the grade variable \[F(3,177) = 2.943; p < .05\]. Tukey test was performed in order to reveal to which groups this difference originated. According to the Tukey test, first-grade prospective Turkish teachers (x = 3.18) show a significant difference favouring first graders compared to third-grade prospective Turkish teachers (x = 2.90). On the other hand, the perception levels of prospective Turkish teachers towards digital speaking tendencies, the negative perspective of the scale towards digital speech \[F(3,177) = 1.655, p > .05\], the positive perspective of digital speech \[F(3,177) = .107, p > .05\] and features of digital speech \[F(3,177) = .961, p > .05\] do not show a significant difference in sub-dimensions according to the grade level variable.

According to the total scale score and sub-dimension scores of the public speaking anxiety scale in terms of the average number of books they read in a year, the one-way ANOVA test was applied to determine whether the perception levels of prospective Turkish teachers about public speaking anxiety differ. The results obtained as a result of the tests applied are shown in Table 12.

**Table 12. One-Way ANOVA Analysis Results of Prospective Turkish Teachers' Public Speaking Anxiety According to Grade Level Variable**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>sd</th>
<th>Mean Squares</th>
<th>F</th>
<th>p</th>
<th>Significant Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive</td>
<td>Between Groups</td>
<td>1.769</td>
<td>3</td>
<td>.590</td>
<td>.960</td>
<td>.413</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>108.743</td>
<td>177</td>
<td>.614</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>110.512</td>
<td>180</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioral</td>
<td>Between Groups</td>
<td>1.417</td>
<td>3</td>
<td>.472</td>
<td>.773</td>
<td>.511</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>108.154</td>
<td>177</td>
<td>.611</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>109.571</td>
<td>180</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychological</td>
<td>Between Groups</td>
<td>.426</td>
<td>3</td>
<td>.142</td>
<td>.282</td>
<td>.838</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>89.188</td>
<td>177</td>
<td>.504</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>89.614</td>
<td>180</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Between Groups</td>
<td>1.266</td>
<td>3</td>
<td>.422</td>
<td>.85</td>
<td>.468</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>87.835</td>
<td>177</td>
<td>.496</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>89.101</td>
<td>180</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to Table 12, the perception levels of prospective Turkish teachers towards public speaking anxiety do not show a significant difference according to the variable of the average number of books they read in a year \[F(3,177) = .85, p > .05\]. On the other hand, perception levels of public
speaking anxieties were determined by the scale's cognitive \([F(3-177) = .960, p>.05]\), behavioural \([F(3-177) = .773, p>.05]\) and psychological \([F(3-177) = .282, p>.05]\) do not show a significant difference in sub-dimensions according to the average number of books they read in a year.

A one-way ANOVA test was applied to determine whether the perception levels of prospective Turkish teachers towards digital speaking tendencies differ when the total scale score and sub-dimension scores of the digital speaking tendency scale in terms of the variable of the average number of books they read in a year are taken into account. The results obtained from the tests are shown in Table 13.

**Table 13. One-Way ANOVA Analysis Results of Prospective Turkish Teachers' Digital Speech Tendency by the Variable of Average Number of Books Read in a Year**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>sd</th>
<th>Mean Squares</th>
<th>F</th>
<th>p</th>
<th>Significant Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative Perspective on Digital Conversation</td>
<td>Between Groups</td>
<td>3.40</td>
<td>3</td>
<td>1.135</td>
<td>1.715</td>
<td>.166</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>117.087</td>
<td>177</td>
<td>.662</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>120.490</td>
<td>180</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Perspective on Digital Conversation</td>
<td>Between Groups</td>
<td>2.127</td>
<td>3</td>
<td>.709</td>
<td>1.049</td>
<td>.372</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>119.692</td>
<td>177</td>
<td>.676</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>121.819</td>
<td>180</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Features of Digital Speech</td>
<td>Between Groups</td>
<td>.098</td>
<td>3</td>
<td>.033</td>
<td>.044</td>
<td>.988</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>130.118</td>
<td>177</td>
<td>.735</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>130.215</td>
<td>180</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Between Groups</td>
<td>.285</td>
<td>3</td>
<td>.095</td>
<td>.423</td>
<td>.737</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>39.726</td>
<td>177</td>
<td>.224</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>40.011</td>
<td>180</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Considering Table 13, the digital speaking tendencies of prospective Turkish teachers do not show a significant difference according to the average number of books they read in a year \([F(3-177)=423; p>.05]\). On the other hand, the perception levels of prospective Turkish teachers towards digital speaking tendencies, the negative perspective of the scale towards digital speech \([F(3-177)=1.715, p>.05]\), the positive perspective of digital speech \([F(3-177)=1.049, p>.05]\) and features of digital speech \([F(3-177)=.044, p>.05]\) also do not show a significant difference according to the grade level variable.

According to the total scale score and sub-dimension scores of the public speaking anxiety scale in terms of the time spent on the internet on an average day, the one-way ANOVA test was applied to determine whether the perception levels of prospective Turkish teachers for public speaking anxiety differ. The results obtained from the test are shown in Table 14.
Table 14. One-Way ANOVA Analysis Results of Prospective Turkish Teachers' Public Speaking Anxiety According to the Time They Spend on the Internet in an Average Day

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>sd</th>
<th>Mean Squares</th>
<th>F</th>
<th>p</th>
<th>Significant Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive</td>
<td>Between Groups</td>
<td>3.585</td>
<td>3</td>
<td>1.195</td>
<td>1.978</td>
<td>.119</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>106.927</td>
<td>177</td>
<td>.604</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>110.512</td>
<td>180</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioral</td>
<td>Between Groups</td>
<td>1.749</td>
<td>3</td>
<td>.779</td>
<td>.957</td>
<td>.414</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>107.822</td>
<td>177</td>
<td>.49</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>109.571</td>
<td>180</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychological</td>
<td>Between Groups</td>
<td>2.277</td>
<td>3</td>
<td>.583</td>
<td>1.538</td>
<td>.206</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>87.337</td>
<td>177</td>
<td>.609</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>89.614</td>
<td>180</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Between Groups</td>
<td>2.336</td>
<td>3</td>
<td>.759</td>
<td>1.588</td>
<td>.194</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>86.765</td>
<td>177</td>
<td>.493</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>89.101</td>
<td>180</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to Table 14, the perception levels of prospective Turkish teachers towards public speaking anxiety do not show a significant difference according to the time they spend on the internet in an average day \[F(3,177)=1.588, p>.05\]. On the other hand, perception levels of public speaking anxieties were determined by the scale's cognitive \[F(3,177)=1.978, p>.05\], behavioural \[F(3,177)=.957, p>.05\] and psychological \[F(3,177)=1.538, p>.05\] does not show a significant difference in sub-dimensions according to the time they spend on the internet in an average day.

According to the total scale score and sub-dimensions of the digital speaking disposition scale in terms of the time they spend on the internet in an average day, the One-way ANOVA test was applied to determine whether the perception levels of prospective Turkish teachers towards digital speaking tendencies differ. The results obtained from the test are shown in Table 15.

Table 15. One-Way ANOVA Analysis Results of Prospective Turkish Teachers' Digital Conversation Tendencies According to the Time They Spend on the Internet in an Average Day

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>sd</th>
<th>Mean Squares</th>
<th>F</th>
<th>p</th>
<th>Significant Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative Perspective on Digital</td>
<td>Between Groups</td>
<td>3.587</td>
<td>3</td>
<td>1.196</td>
<td>1.811</td>
<td>.147</td>
<td>-</td>
</tr>
<tr>
<td>Conversation</td>
<td>Within Groups</td>
<td>116.903</td>
<td>177</td>
<td>.660</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>120.490</td>
<td>180</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Perspective on Digital</td>
<td>Between Groups</td>
<td>.966</td>
<td>3</td>
<td>.322</td>
<td>.472</td>
<td>.702</td>
<td>-</td>
</tr>
<tr>
<td>Conversation</td>
<td>Within Groups</td>
<td>120.853</td>
<td>177</td>
<td>.683</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>121.819</td>
<td>180</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Features of Digital Speech</td>
<td>Between Groups</td>
<td>3.233</td>
<td>3</td>
<td>1.078</td>
<td>1.502</td>
<td>.216</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>126.982</td>
<td>177</td>
<td>.717</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>130.215</td>
<td>180</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Considering Table 15, digital speaking tendencies of prospective Turkish teachers do not show a significant difference according to the time they spend on the internet in a day \[F(3,177) = 2.404; p>.05\]. In addition, the perception levels of prospective Turkish teachers towards digital speaking tendencies, the negative perspective of the scale towards digital speech \[F(3,177) = 1.811, p>.05\], the positive perspective of digital speech \[F(3,177) = .742, p>.05\] and the characteristics of digital speech \[F(3,177) = .216, p>.05\] also do not show a significant difference in the sub-dimensions of the time they spend on the internet in an average day.

Table 16. Pearson Correlation Analysis on the Relationship Between Prospective Turkish Teachers' Public Speaking Anxiety and Digital Speaking Tendencies

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Writing</th>
<th>Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Speaking Anxiety</td>
<td>Pearson Correlation</td>
<td>.327**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000*</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>181</td>
</tr>
<tr>
<td>Digital Conversation</td>
<td>Pearson Correlation</td>
<td>.327**</td>
</tr>
<tr>
<td>Trend</td>
<td>Sig. (2-tailed)</td>
<td>.000*</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>181</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed)
*p<.01 level is significant.

When Table 16 is examined, it is seen that there is a positive low-level significant relationship between prospective Turkish teachers' public speaking anxiety and digital speaking disposition \[r=0.327, p<.01\]. Accordingly, it can be said that as the prospective Turkish teachers' writing increases, their reading also increases. It was considering the coefficient of determination \[r^2=0.10\], it can be said that 10% of the total variance in the writing scale is due to the reading scale.

**Discussion and Conclusion**

This study determined the relationship between prospective Turkish teachers' public speaking anxiety and digital speaking tendencies. One hundred eighty-one prospective Turkish teachers studying at Çanakkale Onsekiz Mart University participated in the research. 70.2% of the participants of the study are female, and 29.8% are prospective male teachers. 17.7% of the participants were first grade, 20.4% were second grade, 28.2% were third grade, and 33.7% were fourth-grade students. In a year, on average, 25.4% of the participants read 0-5 books, 24.3% read 6-10 books, 22.7% read 11-15 books, 27.6% read 16 or more books. In addition, 10.5% of the participants spend 0-1 hour, 21.5% 2-3 hours, 35.9% 4-6 hours, 32% spend 7 hours or more on the internet.

It has been observed that there is a positive and low-level significant relationship between prospective Turkish teachers' public speaking anxiety and digital speaking disposition. Furthermore, the low level of correlation indicates that there is a relationship between them. Accordingly, it can be
said that prospective Turkish teachers' public speaking anxieties and digital speaking tendencies affect each other positively and at a low level.

Prospective Turkish teachers' concerns about speaking in front of the public were at the level of "I partially agree". This result coincides with some speech anxiety studies in the literature (Karasakalolu and Bulut, 2019; Özkan and Kınay, 2015). In the study conducted by İşcan and Karagöz (2016), it was concluded that prospective Turkish teachers have a low level of speaking anxiety.

The public speaking anxiety of prospective Turkish teachers does not show a significant difference in gender when the total scale score is considered. In other words, the gender variable is not an influential variable on prospective Turkish teachers' public speaking anxiety. This result coincides with some speech anxiety studies in the literature (Akran and Özdemir, 2018; Lüle, 2015; Özkan and Kınay, 2015). However, in some studies, it has been concluded that the speech anxiety levels of female students are lower than male students (Kana, 2015; Kuşdemir and Katrancı, 2015).

Public speaking anxiety of prospective Turkish teachers does not significantly differ in terms of the grade variable when the whole scale is considered. In other words, the grade variable is not an influential variable on prospective Turkish teachers' public speaking anxiety. This result does not overlap with some speech anxiety studies in the literature (Lüle, 2015; Özkan and Kınay, 2015).

No significant difference was found in the total and sub-dimensions of the prospective Turkish teachers' public speaking anxiety scale according to the variables of grade level, the average number of books read in a year and time spent on the internet in an average day. Therefore, it is understood that prospective Turkish teachers' public speaking anxieties do not depend on the variables of grade level, the average number of books read in a year, and time spent on the internet in an average day.

A significant difference was found between the first and third grades favouring the first graders in prospective Turkish teachers' entire digital speaking disposition scale. Based on this result, it can be said that the digital speaking tendencies of the first-grade students are higher than the third-grade students. In addition, no significant difference was found in the sub-dimensions of the digital speaking disposition scale according to the grade level variable.

According to the variables of the average number of books read in a year and the time spent on the internet in an average day, there was no significant difference in the total and sub-dimensions of the prospective Turkish teachers' digital speaking tendency scale. Therefore, it is understood that the digital speaking tendencies of prospective Turkish teachers do not depend on the average number of books read in a year and the time spent on the internet in an average day.
Public speech anxiety should be considered as a different social anxiety (Blöte, Kint, Miers and Westenberg, 2009). In speaking anxiety, teachers need to give their students training that will strengthen their speaking skills. In order to eliminate anxiety, ways to reach the source of anxiety and fight it should be taught. Thus, awareness about the fears that increase the level of anxiety will be raised, and a solution will be approached (Özden, 2018; İşcan and Karagöz, 2016). In mother tongue education, speaking education and eloquence (diction) should be given together without separating them. (Únal and Özden, 2018). There are different solution trials for public speaking anxiety, but no study has been found on Turkish teachers (Ansari, 2015; Cheng, Horwitz and Schallert, 1999; Šalkevičius, Miškinytė and Navickas, 2019; Shin and Newman, 2018). Including it in the curriculum for all education levels can contribute to solving the problem of speaking anxiety in society. In the development of Turkish teachers, they can be considered a separate course to specialize in more depth. In addition, in-service training of teachers in schools on these issues can contribute to speaking anxiety.

In order to improve the qualifications of state-affiliated teachers in Turkey, the benefits of technology have been utilized at the highest level recently. In particular, using digital systems, synchronous and asynchronous in-service training and courses are provided by getting rid of both time and space limitations. Teachers are the most important people in a society who need to speak correctly, beautifully and effectively (Akkaya, 2012). Especially Turkish teachers should be more careful about these issues. If they have lacks, they must make up for their deficiencies. Furthermore, for Turkish teachers who have started their professional life, training and courses can reduce public speaking anxiety and increase awareness.

It is essential to prepare and implement the practices and lessons in mother tongue teaching, starting from pre-school education, according to the brain-based approach (Onan, 2016). With the brain-bevel learning approach, materials should be used in a way that appeals to both the right and left hemispheres of the learner's brain. Thus, speaking skills can be developed, and all language skills and a solution to speech anxiety can be provided.

Speech disorders can also cause speech anxiety. Speech disorders can be caused by physical and mental reasons (Erdem, 2013; Kurudayıoğlu, 2003). Speech anxiety can also be prevented by adding the cause or causes of speech disorders and solving errors in the curriculum at all education levels. For this, it is of great importance to carry out large-scale research and projects.

References


Ergin, M. (1972) Türk dil bilgisi, İstanbul:Edebiyat fakültesi basmevi


